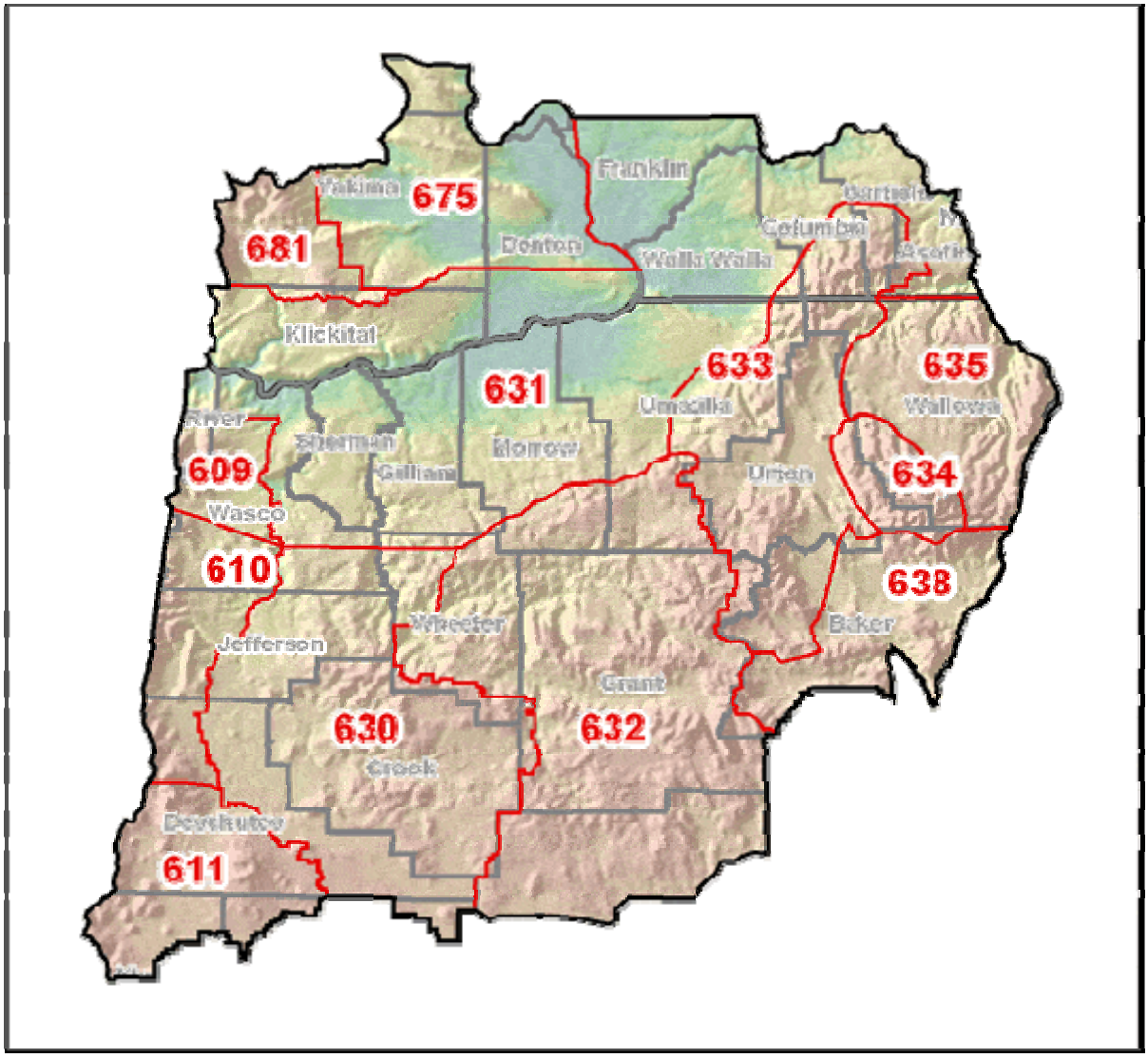
PENDLETON FIRE WEATHER ANNUAL SUMMARY 2005

for

CENTRAL AND NORTHEAST OREGON, SOUTHCENTRAL AND SOUTHEAST WASHINGTON

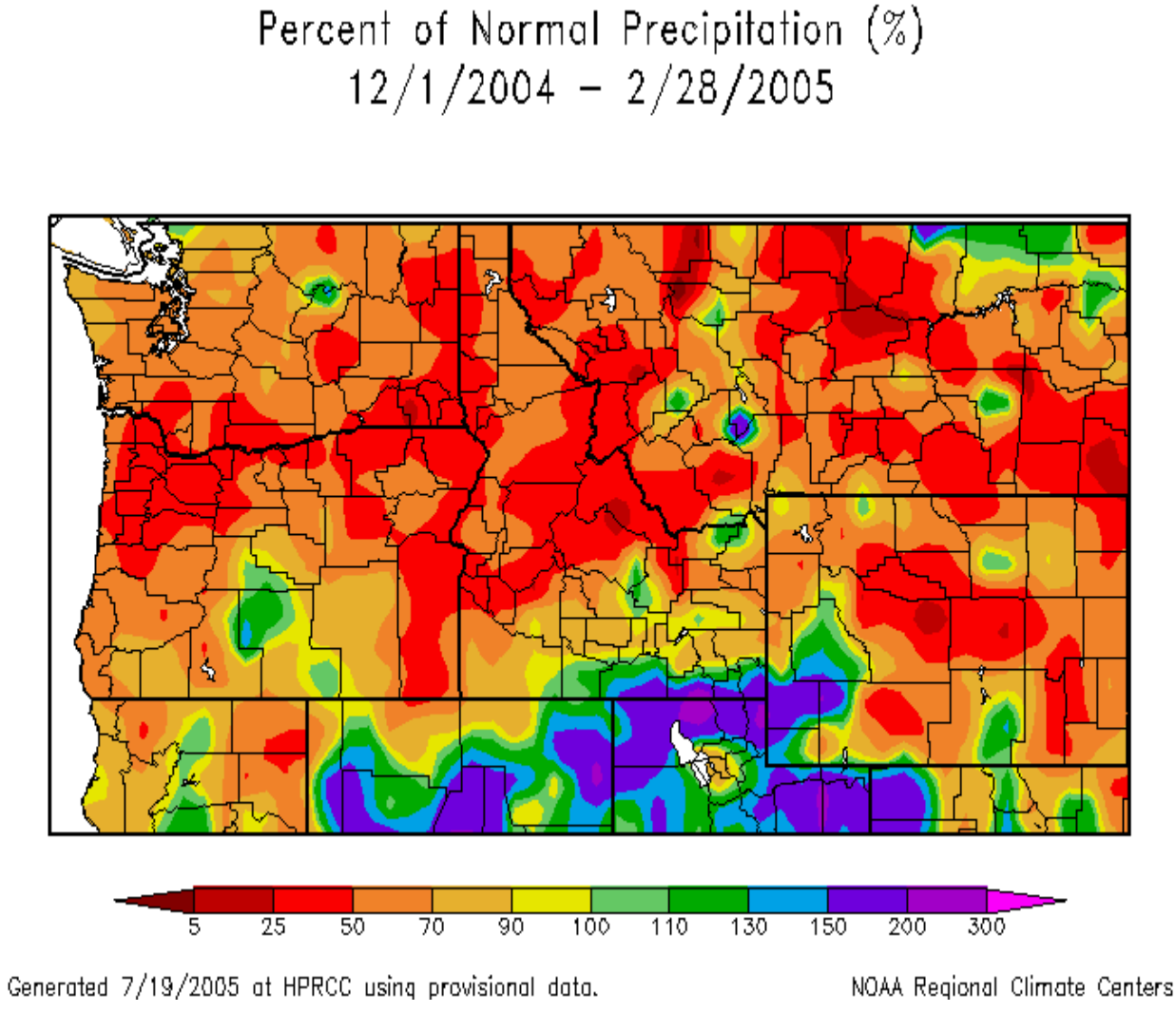
Prepared by Joe Solomon – Fire Weather Program manager



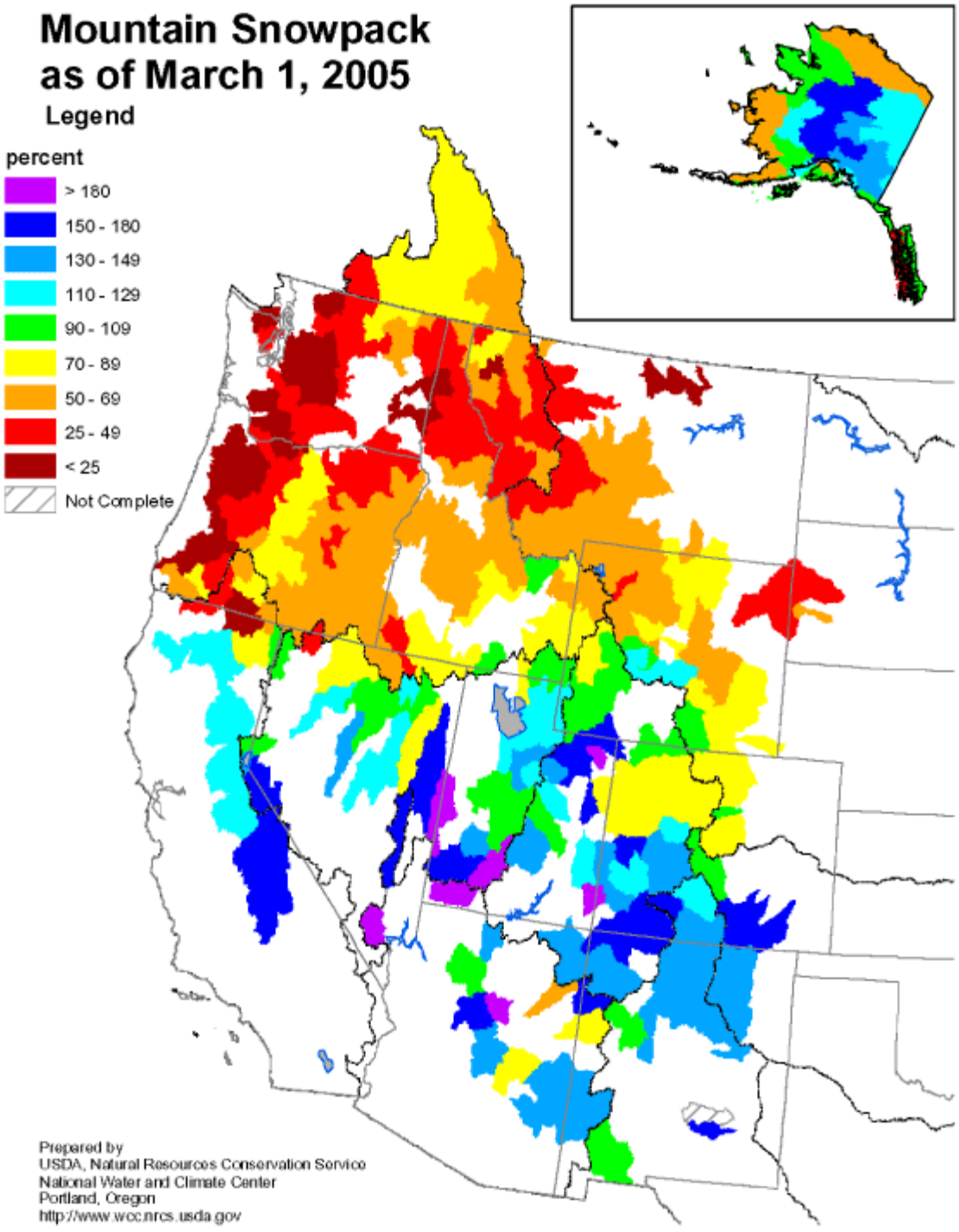
Weather Review

Fall and Winter 2004-2005 (Nov – Feb)

This was one of the driest winters across the Pacific Northwest. There were fears that it would rival the winter of 1977 as the driest winter ever. For Pendleton this was the second driest Fall and Winter period on record, only behind the year of 1977. The only area that was near normal were portions of central and south central Oregon. Snowpack (see snowpack chart) and precipitation totals at the end of February showed regional totals only near half of normal. Temperatures during the December through February period ran above normal. The lack of storms moving through the region allowed prolonged periods of high pressure to provide the above normal temperatures.



Mountain Snowpack as of March 1, 2005



Prepared by
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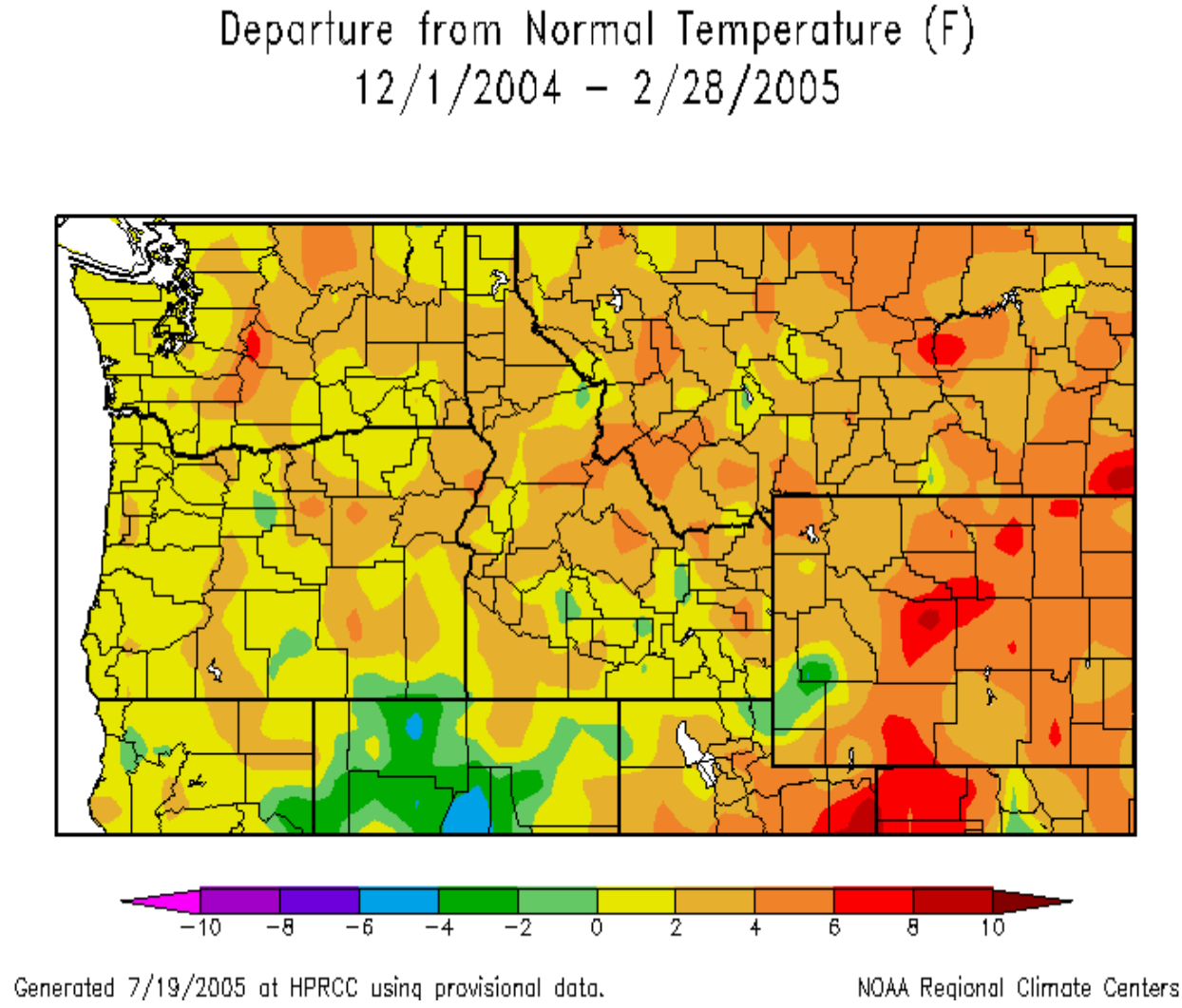
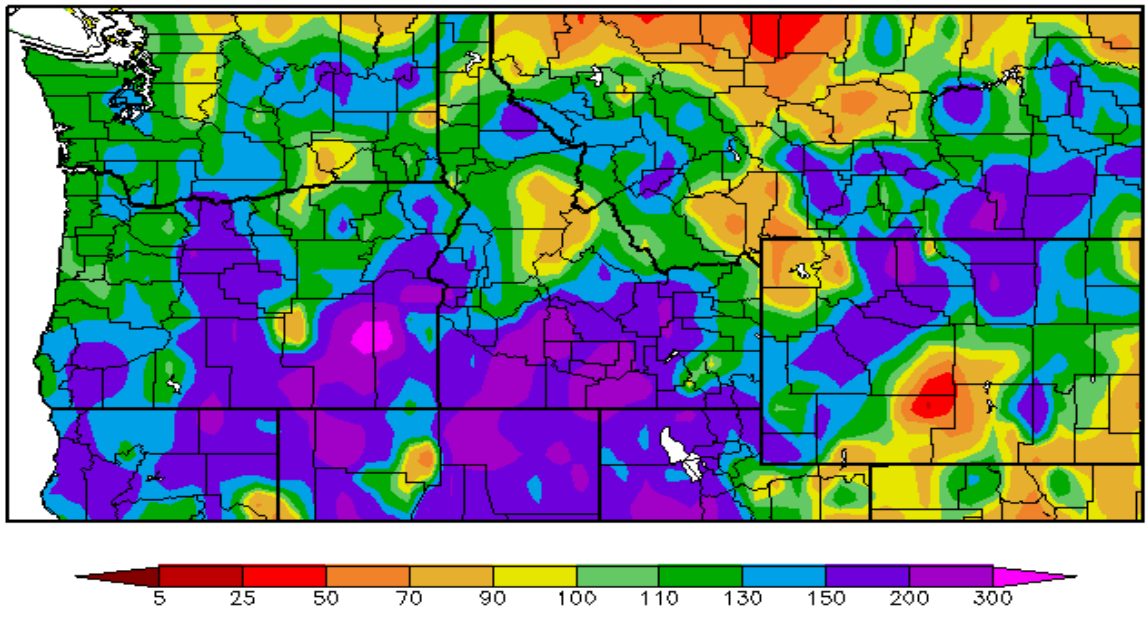
National Water and Climate Center
Portland, Oregon
http://www.wcc.nrcs.usda.gov



Spring 2005 (Mar – May)

An abrupt change in the weather pattern occurred in mid March that produced a very wet Spring and hampered the Spring prescribed burn season. After a very dry Winter, March ushered in the beginning of a two to three month wet period that ended in early June. A large portion of eastern Oregon received 100 to 150 percent of normal precipitation during the Spring. Southeast Washington was the only area that remained at or below 100 percent of normal precipitation. Precipitation during this wet period came primarily as rain meaning that the low Winter snowpack was never made up. Temperatures continued to be warmer than normal through the Spring.

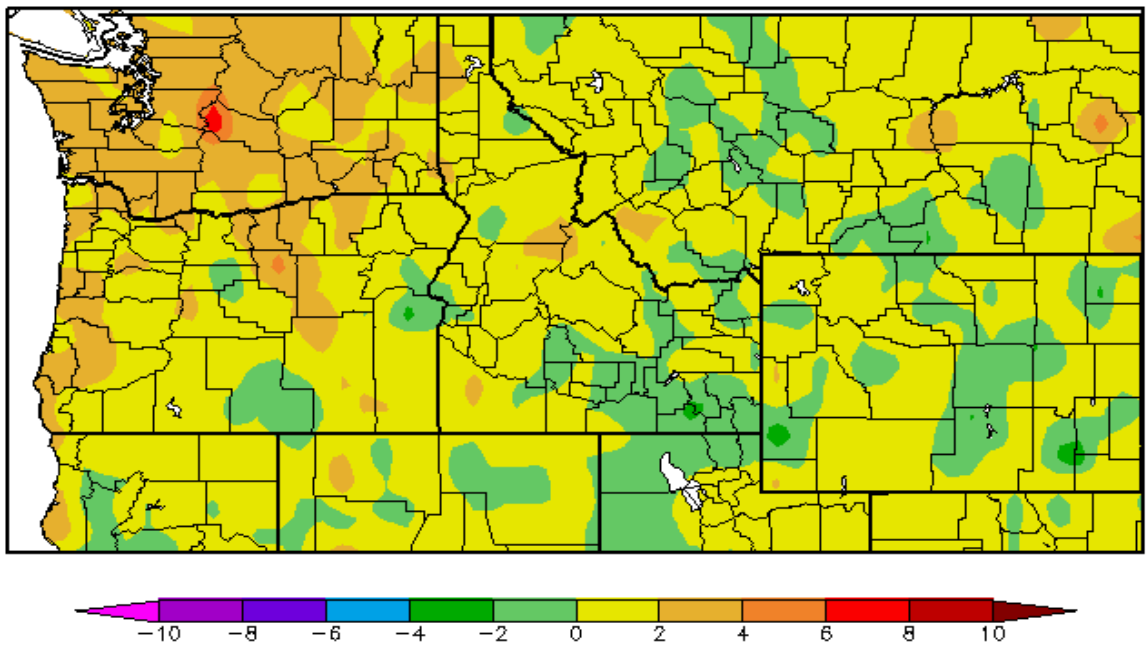
Percent of Normal Precipitation (%)
3/1/2005 – 5/31/2005



Generated 9/12/2005 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)
3/1/2005 – 5/31/2005



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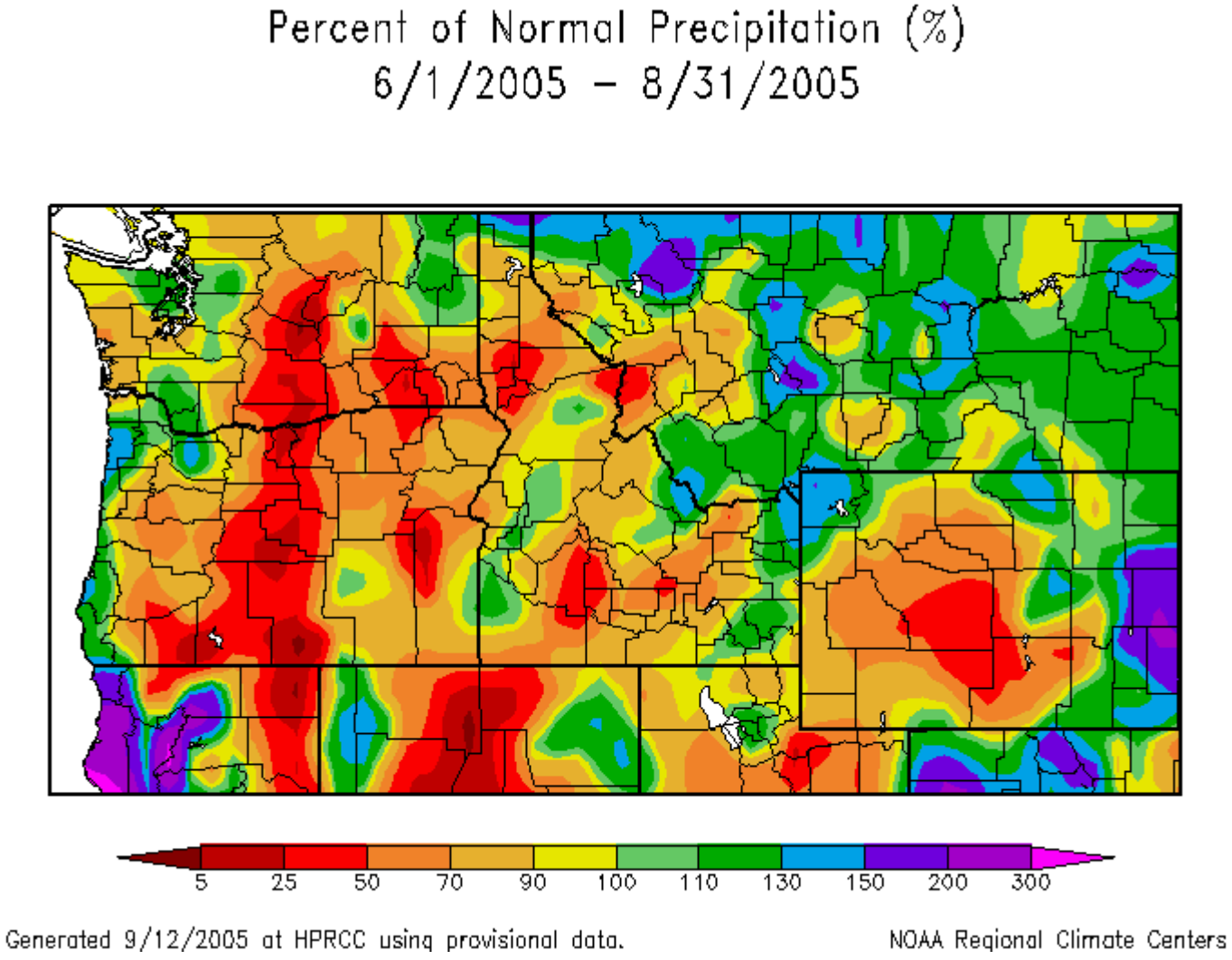
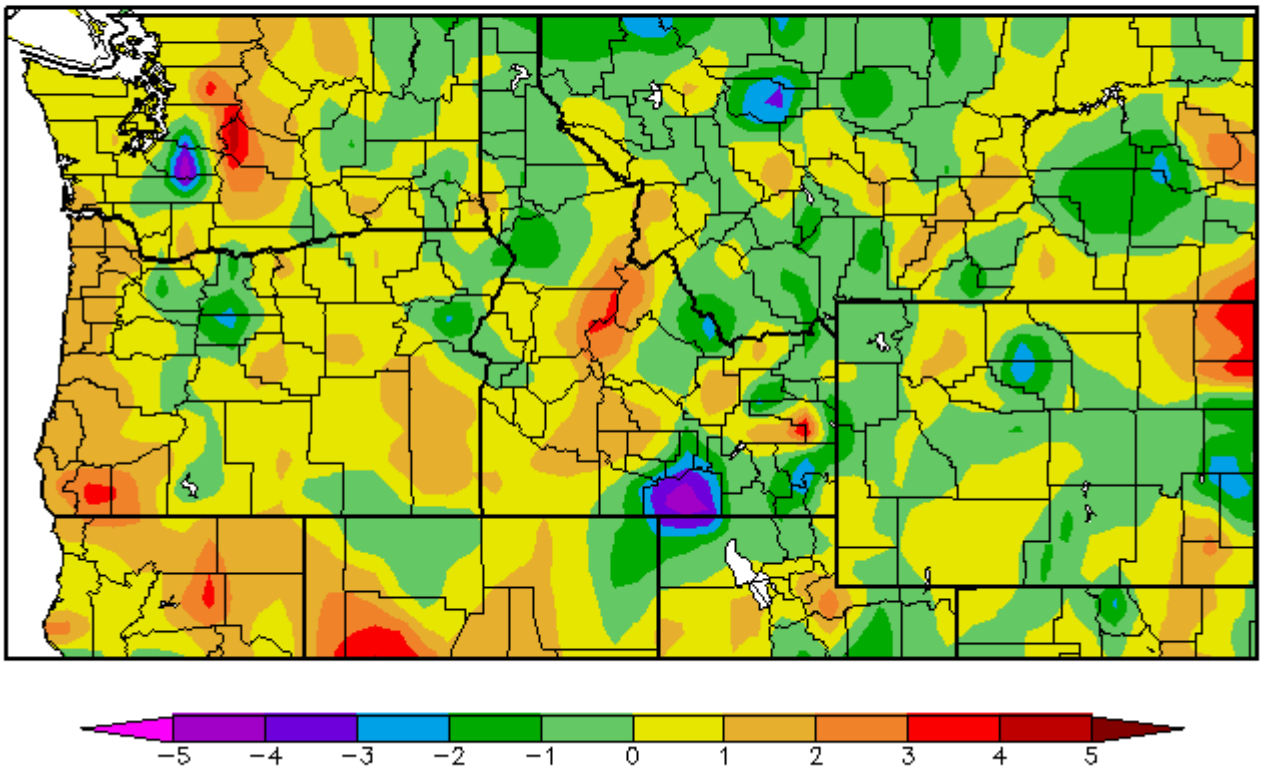
NOAA Regional Climate Centers

Summer 2005 (Jun – Sep)

As mentioned, early June started off wet as the wet Spring season came to an end. By mid June the first of the persistent summer time high pressures began to exert their influence over the region. Very little precipitation was observed after mid June with overall summer precipitation averages running below normal while temperatures were near normal.



Departure from Normal Temperature (F)
6/1/2005 – 8/31/2005

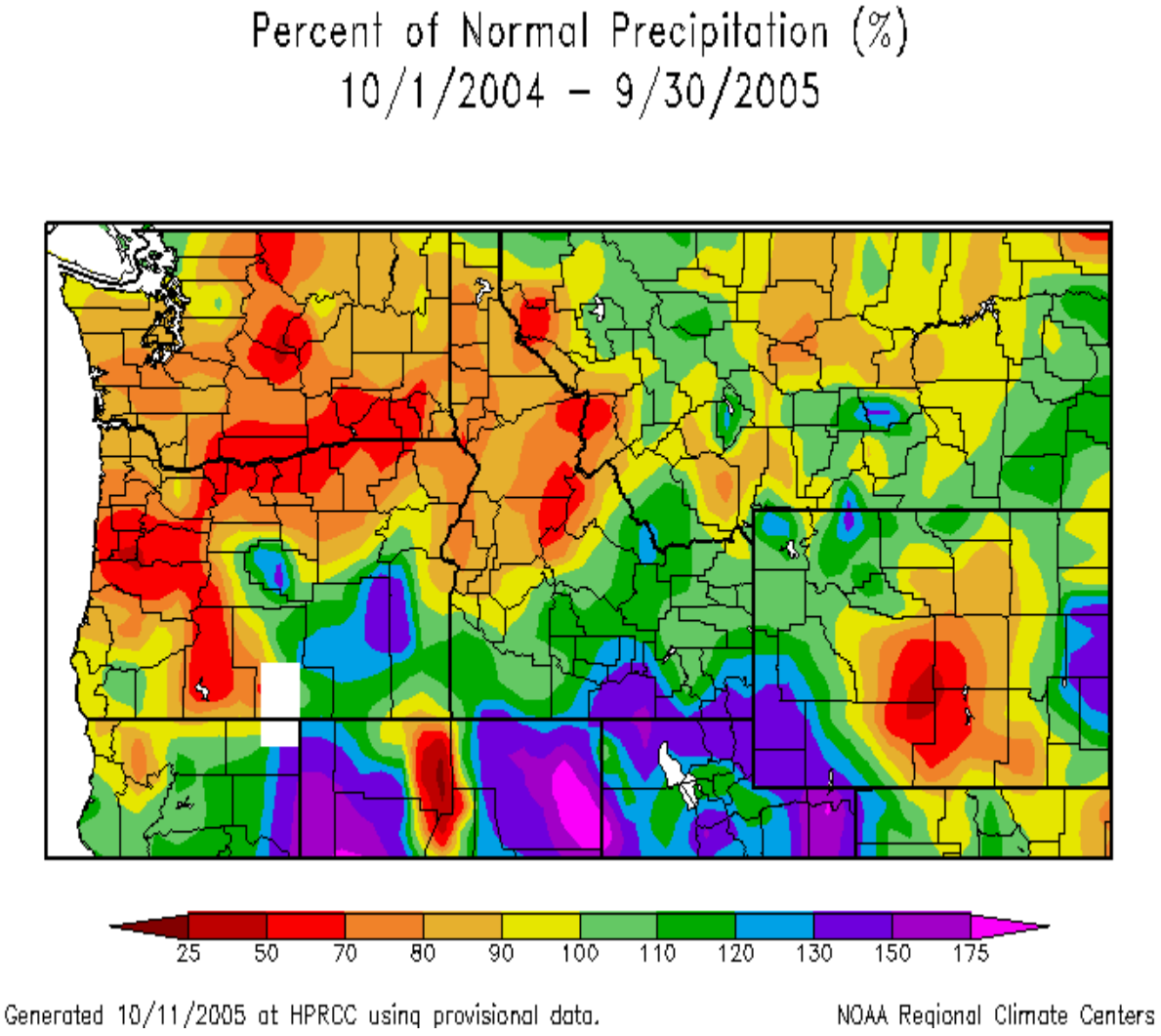


Generated 9/12/2005 at HPRCC using provisional data.

NOAA Regional Climate Centers

Weather Review Summary Fall 2004 – Summer 2005

The very dry Winter with near record low snowpack had a significant impact on some areas of the forecast district. Even though we had a very wet Spring, the Winter precipitation deficit could not be made up. Large areas of eastern Washington and northern Oregon remained below normal for the water year (October 2004 – September 2005). The abundant Spring rain all but eliminated the Spring prescribe burn season and delayed the onset of the fire season until late July. However, the rain also lead to a large growth of grass fuels that once cured lead to a short but busy fire season. This was especially true in southeast Washington and northeast Oregon where the majority of wildfires occurred this year.



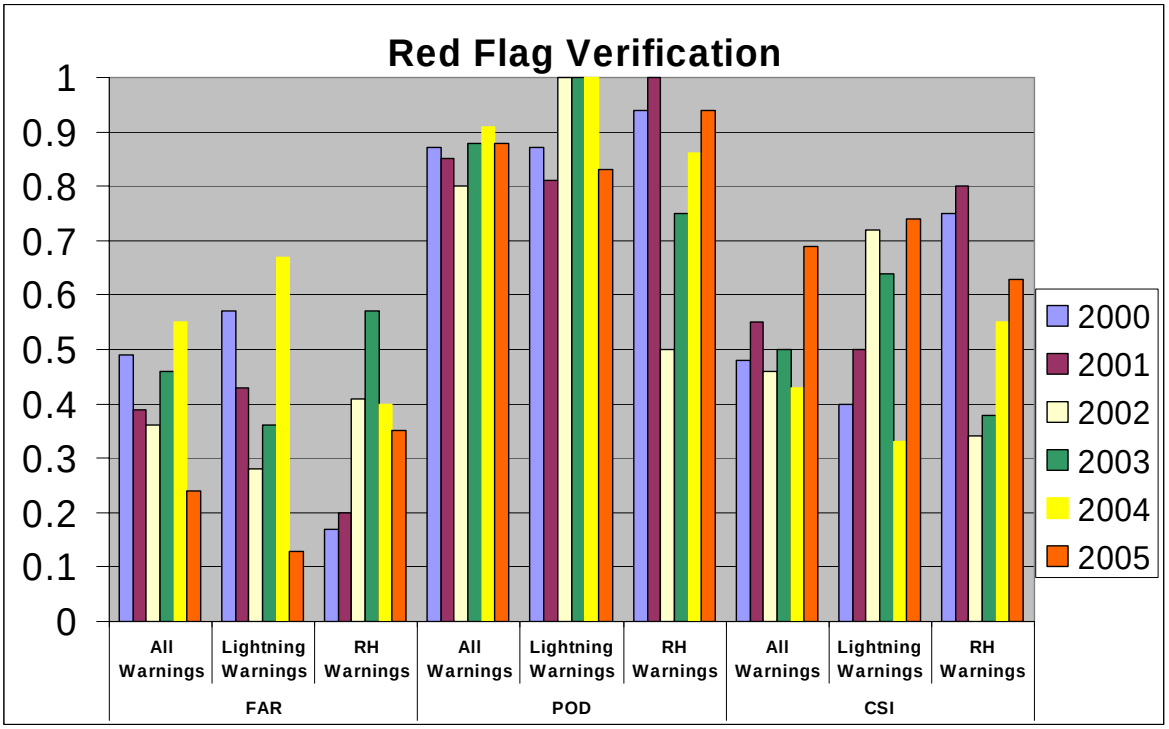
Red Flag Warning Verification

Pendleton Red Flag Warnings 2005

Date	Zones	Reason	Verification	Lead Time
July 15	675	Wind/Low RH	No	0 Hrs
July 19	609, 631, 675	Wind/Low RH	Yes – All	0-4 Hrs
July 20	609	Wind/ Low RH	Yes	6 Hrs
July 20	630,631,632,638,675	Haines 6/Low RH	Yes – All	24 Hrs
July 21-22	609,610,611,630,631 632,638,675,681	Lightning after dry period	Yes – 609,610,630,631, 675,681 No – 611,632,638	12 Hrs
July 26	609,610,611,630,631 632,633,634,635,638	Haines 6/Low RH	Yes - 609,610,611,630 631,632,633,634,635 ,638	24Hrs
Aug 7	630,632,633,634,635 638	Lightning after dry period	Yes – 630,632, 635 No – 633,634,638	24Hrs
Aug 9	634,635,638	Lightning after dry period	Yes – 634,635, 638	1 Hrs
Aug 21	610,611,630,632,633 634,635,638	Lightning after dry period	Yes – 610,611,630,632 635 No – 633,634,638	12 Hrs
Aug 23	631,675	Wind/Low RH	No	0 Hrs
Aug 24	609	Wind/Low RH	Yes	0 Hrs
July 25	632	Dry Lightning	Missed	0 Hrs
Aug 5	609	Wind/ Low RH	Missed	0 Hrs
Aug 9-10	631	Wind/Low RH	Missed	0 Hrs
Aug 23	638	Wind/Low RH	Missed	0 Hrs
Aug17-28	609	Wind/Low RH	Missed	0 Hrs
				Avg lead time 10.5 Hrs

Warnings Issued:	**All Lightning: 26**	**Wind/Low RH or Haines6/Low RH: 23 Total = 49**
Correct Warnings:	**All Lightning: 17**	**Wind/Low RH or Haines6/Low RH: 20 Total = 37**
Incorrect Warnings:	**All Lightning: 9**	**Wind/Low RH or Haines6/Low RH: 3 Total = 12**
Missed warnings:	**All Lightning: 1**	**Wind/Low RH or Haines6/Low RH: 5 Total = 6**
False Alarm Rate:	**All Lightning = .35**	**Wind/Low RH or Haines6/Low RH = .13 All = .24**
Probability of Detection:	**All Lightning = .94**	**Wind/Low RH or Haines6/Low RH = .83 All = .88**
Critical Success Index:	**All Lightning = .63**	**Wind/Low RH or Haines6/Low RH = .74 All = .69**

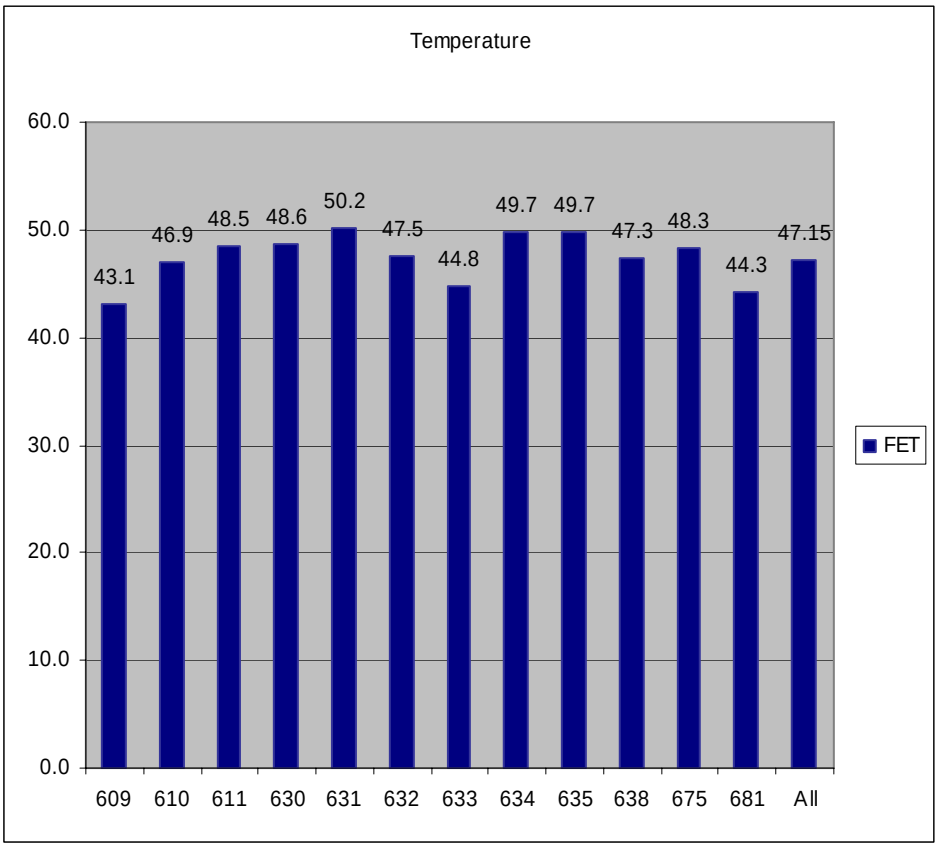
Note: For highest accuracy, False Alarm Rate should approach .00 and Critical Success Index and Probability of Detection 1.00

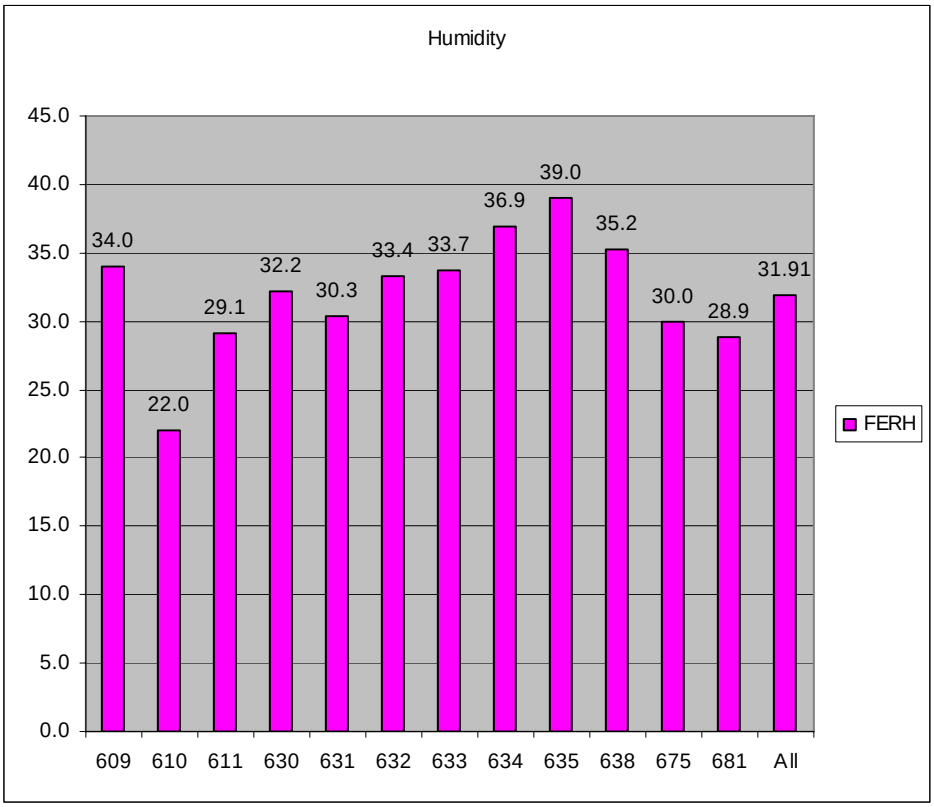


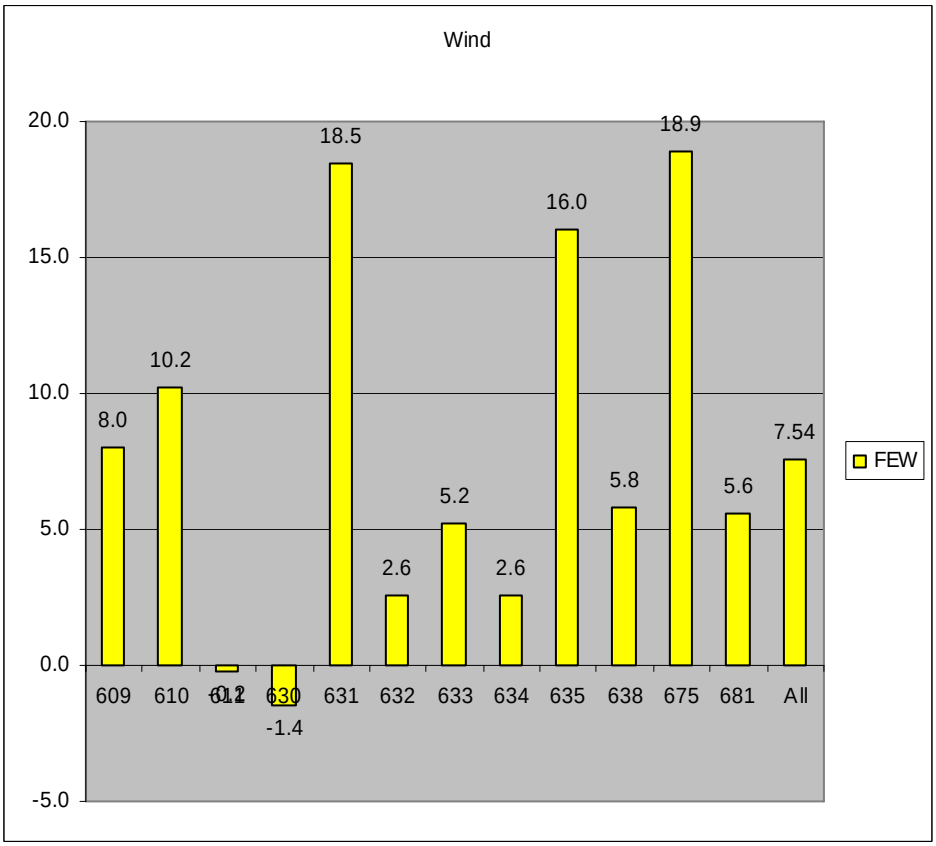
2005 verification (Orange) broken down into individual warning categories compared to the previous years 2000-2004.

2005 NFDRS Verification

Following charts show forecast percentage improvement over persistence for temperatures, relative humidity and wind speed for each zone.



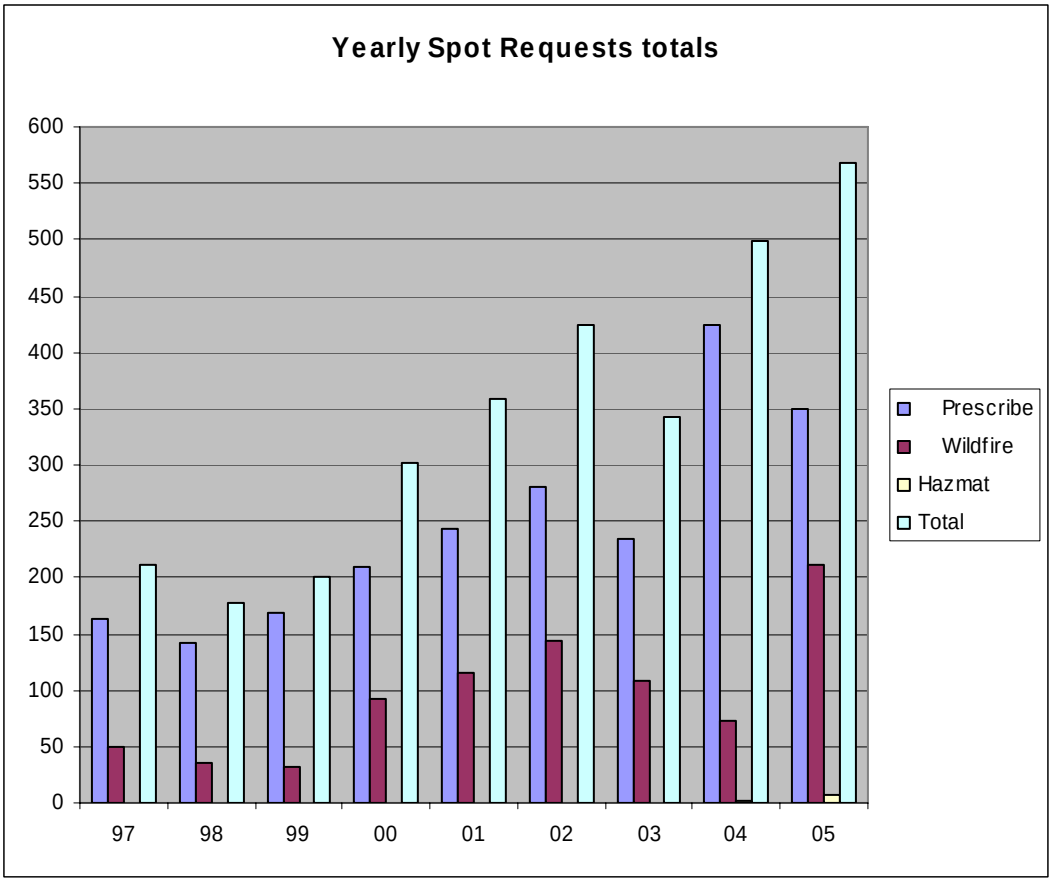

Humidity
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
34.0
22.0
29.1
32.2
30.3
33.4
33.7
36.9
39.0
35.2
30.0
28.9
31.91
609
610
611
630
631
632
633
634
635
638
675
681
All
FERH


Wind
20.0
15.0
10.0
5.0
0.0
-5.0
8.0
10.2
18.5
2.6
5.2
2.6
16.0
5.8
18.9
5.6
7.54
-1.4
609
610
631
632
633
634
635
638
675
681
All
FEW

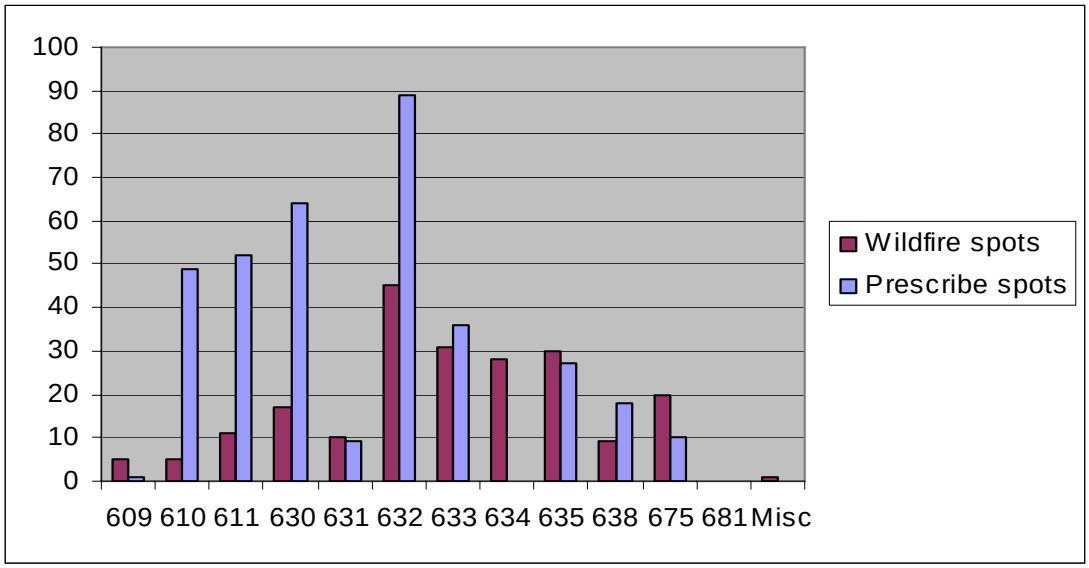
2005 Forecast Issued

Month	Routine Forecast		Spot Forecast		Red Flag Events		On Site	Zone Trend	Air Transport & Stability Forecast
	FW Fcsts	LM Fcsts	Wildfire /Hazmat	Prescribed	FWX Watch	Red Flag Warning	AMRS Fcsts	NFDRS Fcsts	
Jan	0	21	4	4	0	0	0	0	31
Feb	0	20	2	12	0	0	0	0	28
Mar	0	32	1	20	0	0	0	0	31
Apr	0	44	0	22	0	0	0	0	30
May	6	40	2	28	0	0	0	3	31
Jun	60	0	7	36	0	0	0	30	30
Jul	62	0	42	1	2	3	25	29	31
Aug	62	0	141	1	1	1	27	29	31
Sep	60	0	15	42	0	0	0	29	30
Oct	2	42	1	177	0	0	0	23	31
Nov	0	18	1	7	0	0	0	1	30
Dec	0	0	0	0	0	0	0	0	31
Total	**252**	**217**	**216**	**350**	**3**	**4**	**52**	**144**	**365**

2005 Spot Forecast Totals



Total number of spot forecast issued by the Pendleton weather office through Novemberr 2005 was 566. 350 prescribed spot forecasts, 209 wildfire requests and 7 hazmat forecasts. The 566 total spot forecasts issued by the Pendleton weather office set yet another yearly record which was previously 500 set in 2004. The 209 wildfire spot request set a new yearly record which was previously 144 in 2002. In August only we issued 137 spot forecasts for wildfires. Most of the Augusts spots came from the eastern mountain region of eastern Oregon and southeast Washington attesting to the increased wildfire activity in those area (see next chart). Prescribed spot forecast actually decreased this year due to the minimal burning that took place during the wet Spring months. Except for the 2003 year there continues to be a steady increase in the total number of spot request submitted to the Pendleton weather office.



A breakdown of individual zones shows the number of wildfire and prescribe spot requests per zone for 2005.

PENDLETON INCIDENT METEOROLOGIST (IMET) DISPATCHES FOR 2005

IMET and Dates	Incident Name & Location	Incident Team	Incident FBAN
Joe Solomon, 7/26-8/9	Blossom near Agnes, OR	Paul	Ziel
Jeremy Wolf (T), 7/27-8/4	Blossom near Agnes, OR	Paul	Ziel
Bob Tobin, 8/2-8/11	Mule Peak near Union, OR	West	Jones
Pat Gilcrest (T), 8/4-8/11	Mule Peak near Union, OR	West	Jones
Jenifer Zeltwanger, 8/8-8/19	School near Pomeroy, WA	Anderson	Heckman
Scott Weishaar, 8/10-8/22	Tryon near Imnaha, OR	Lunde	Becker, Aragon (T)
Jermey Wolf (T), 8/11-8/22	Tryon near Imnaha, OR	Lunde	Becker, Aragon (T)
Todd Carter, 8/16-8/25	Burnt Cabin near Milton-Freewater, OR	Johnson	Brown, Edge, Godfrey (T)
Joe Solomon, 8/24-9/7	Frank Church WFU near McCall, ID	Hahnenberg, Reinarz	Wallace, Manthei

LIAISON AND TRAINING ACTIVITIES 2005

DATE	LOCATION	ACTION
1/12-13	Southeast, OR	Meetings with Vale BLM, Burns Iteragency Dispatch Center and Malheur NF.
2/10-11	Portland, OR	Meeting with PNWCG Weather Working Team and Region 6 Weather Forecasters.
4/4-8	Boise, ID	IMET Conference
4/27	Pendleton, OR	Meeting with Umatilla NF
4/27	Pasco, WA	Meeting with Benton County Dispatch.
5/13	John Day, OR	S-290 refresher course to Malheur repel crew. Meeting with Malhuer NF.
5/17-18	Richland, WA	S-290. Hanford Reach and Benton County
6/1	Pendleton, OR	Umatilla Reservation smoke management meeting.
9/28	Pendleton, OR	Meeting with Pendleton Interagency Dispatch regarding RFW notification procedures.
10/17	Pendleton, OR	Follow up meeting with Pendleton Interagency Dispatch.
10/19	LaGrande, OR	Meeting with Northeast Interagency Dispatch on new RFW notification procedures.
10/20	Pendleton, OR	Umatilla County smoke management meeting.
11/2-3	Southeast, OR	Meetings with Vale BLM, Burns Iteragency Dispatch Center and Malheur NF.
11/10	LaGrande, OR	Union County smoke management meeting.
11/15-16	Portland, OR	Meeting with PNWCG Weather Working Team and Region 6 Weather Forecasters.
11/28	Pendleton, OR	Umatilla County smoke management meeting.